

Notice of Allowability

Application No.

09/902,774

Examiner

Alan Diamond

Applicant(s)

TAKEDA ET AL.

Art Unit

1753

-- **The MAILING DATE of this communication appears on the cover sheet with the correspondence address--** All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the after-final amendment filed January 28, 2005.
2. ☒ The allowed claim(s) is/are 5-8.
3. ☒ The drawings filed on 28 January 2005 and 10 July 2001 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

REASONS FOR ALLOWANCE

1. The following is an examiner's statement of reasons for allowance: Upon consideration of Applicant's arguments filed January 28, 2005, the instant Examiner agrees with Applicant that the step in instant claim 5 of "separating the power generating region in a direction crossing the series connection of the solar cells on the supporting member" is supported by the originally filed disclosure. The instant specification, at page 12, lines 7-11, discloses that "[t]he solar cell sub-module 13 is divided into two power generating regions 13a and 13b by a laser separation portion 7." Thus, the specification clearly discloses separating the solar cell sub-module. The way a skilled artisan would interpret this portion of the specification is that the solar cell sub-module, itself, has a power generating region, and this power generating region is then separated into the power generating regions 13a and 13b. This is more clearly seen in Figure 6B filed January 28, 2004, where the power generating region has been separated at reference sign 7, forming two power generating regions 13a and 13b. Furthermore, there is nothing indefinite about said step in claim 5. When a power generating region is split, two power generating regions are obtained, and this is seen in both originally filed Figure 6B and Figure 6B filed January 28, 2005. In either of the Figure 6B's, a skilled artisan would understand that in order to get the two power generating regions, a single power generating region is split at the laser separated portion 7. The power generating regions are then connected (spec., page 12, lines 16-22) and this step is also recited in instant claim 5.

Upon consideration of Applicant's arguments filed January 28, 2005, the instant Examiner agrees with Applicant that the recitation in claim 7 that "said resin also serving to bond together the metal base and base section" is supported by the originally filed disclosure. In particular, page 18, line 21, of the specification discloses that "wiring member 36 is sealed in an EVA resin between the metal base 31 and the base section 37b." The Examiner agrees that a person of ordinary skill would know that EVA resin has adhesion properties. The Examiner also agrees with Applicant's argument that "[b]ecause the Specification discloses that the wire member is sealed in EVA between the metal base 31 and the base section 37b, a person of ordinary skill would understand that the EVA resin also serves 'to bond together the metal base and base section'."

Neither Younan et al (U.S. 5,575,861), Dillard (U.S. 5,928,437), Tennant (U.S. 4,321,416), nor JP 11-195803, alone or in combination, teaches or suggests the providing, separating, obtaining/connecting, and preparing steps that are set forth in claim 5 for preparing the plurality of solar cell modules.

With respect to instant claim 6, Hanoka (U.S. 5,733,382) does not teach or suggest a module comprising a supporting member and a plurality of sub-modules mounted on the supporting member, where each sub-module includes a glass substrate and has a plurality of solar cells arranged on the substrate. Hanoka only discloses a single glass substrate/supporting member on which all of the sub-modules/solar cells are formed.

With respect to instant claim 7, while the wiring member of JP 10-082152 may be sealed in a resin, this resin does not serve to bond together the metal base and base section, as here claimed.

U.S. Patents 6,080,998, 6,357,649, and 6,552,258, and JP 11-340488 are hereby made of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alan Diamond whose telephone number is 571-272-1338. The examiner can normally be reached on Monday through Friday, 5:30 a.m. to 2:00 p.m. ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached on 571-272-1342. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Alan Diamond
Primary Examiner
Art Unit 1753

Alan Diamond
February 17, 2005

A handwritten signature in black ink, appearing to read "Alan Diamond", with a stylized flourish at the end.